



A statewide research program led by the Center for Advanced Energy Studies at Idaho National Laboratory will help make Idaho's homes and businesses more energy efficient.

Center for Advanced Energy Studies helps create efficiency research initiative

By [Kortny Rolston](#), INL Communications & Governmental Affairs

The [Center for Advanced Energy Studies](#) at Idaho National Laboratory is spearheading a new statewide research program to help make buildings, homes and industrial systems more energy efficient.

The CAES-led Energy Efficiency Research Initiative (CEERI, pronounced "cheery") will evaluate energy-saving technologies currently on the market to see how well they work. The initiative will also study consumer behavior to determine which technologies people like best and what motivates them to conserve. CEERI also will train architects, engineers and technicians to incorporate energy efficiency into buildings and industrial systems.

The research program involves the CAES partners — [Boise State University](#), INL, [Idaho State University](#) and [University of Idaho](#) — as well as Idaho Power, Micron Technology, the J.R. Simplot Company, the Boise Metro Area Chamber of Commerce, the Idaho Office of Energy Resources, the Natural Resources Defense Council and others.

"Our goal is to take a research-based approach to energy efficiency," said John Gardner, a BSU professor and sustainability expert who is leading the CAES effort. "Technology has come a long way, and we think we can do better in terms of improving energy efficiency."



The best energy appliances won't work if consumers aren't willing to use them.

Did You Know?

The International Energy Agency projects that making buildings, industrial processes and transportation more efficient could cut world energy consumption in 2050 by one-third.

CAES had long planned to delve into energy efficiency research since all four of its partner institutions have expertise in this area. The initiative was spurred last year after Ralph Cavanagh of the Natural Resources Defense Council spoke at a leadership conference sponsored by the Boise Metro Area Chamber of Commerce. He talked about creating an energy efficiency center in Idaho and how it could be an economic tool for the state and its universities.

CAES Director Harold Blackman said improved efficiency goes hand in hand with the work CAES scientists and engineers are already doing in carbon management, nuclear science and engineering, bioenergy and other energy-related fields.

"The cheapest energy is that which you don't use, and if we can better understand how to use less energy to power homes, buildings and industry, it's a savings to consumers across the board," Blackman said. "Improving energy efficiency is an integral part of developing sustainable energy solutions and that's what CAES is about."

The formation of the CEERI is timely, especially for utilities like Idaho Power that are faced with supplying consumers with electricity.

The more its customers embrace energy efficiency and incorporate it into their homes or businesses, the less electricity Idaho Power has to generate or purchase on the open market, which can be costly. Improving energy efficiency also reduces the amount of greenhouse gases a utility emits.

"Energy efficiency is our first resource choice," said Ric Gale, Idaho Power's vice president for corporate responsibility. "When you look at the gamut of energy generation options, there are negatives with every one of them — whether it's cost, siting issues or carbon emissions. We don't have these same negatives associated with cost-effective energy efficiency."

Though Idaho Power has implemented several energy-saving programs and technologies over the past decade, Gale said more work is needed to improve efficiency and educate the public.

"The best energy appliances and best programs don't work if consumers aren't willing to engage," he said. "We've got to get consumers on board."

Gale also believes CAES is the best choice to lead the energy efficiency research program.

"The Idaho universities and INL are already partners in CAES," he said. "CAES is able to bring in all the players and get them to work together."



Improving energy efficiency is an integral part of developing sustainable energy solutions.

[Feature Archive](#)